(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date

5 July 2007 (05.07.2007)

(51) International Patent Classification: C12N 5/06 (2006.01) C07K 16/00 (2006.01) C12N 5/16 (2006.01)

(21) International Application Number:

PCT/US2006/062329

(22) International Filing Date:

19 December 2006 (19.12.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/753,614

23 December 2005 (23.12.2005)

(71) Applicant (for all designated States except US): UNI-VERSITY OF ROCHESTER [US/US]; 601 Elmwood Avenue, Box OTT, Rochester, NY 14642 (US).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): GELBARD, Harris, A. [US/US]; 6 Widewaters Lane, Pittsford, NY 14534 (US). MAGGIRWAR, Sanjay, B. [US/US]; 80 Danbury Circle South, Rochester, NY 14618 (US). DEWHURST, Stephen [US/US]; 157 Glen Ellyn Way, Rochester, NY 14618 (US). **SCHIFITTO, Giovanni** [IT/US]; 2 Evandale Road, Rochester, NY 14618 (US).
- (74) Agents: SPRATT, Gwendolyn, D. et al.; Needle & Rosenberg, P.C., Suite 1000, 999 Peachtree Street, Atlanta, GA 30309-3915 (US).

(10) International Publication Number WO 2007/076372 A3

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:

1 November 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 06/62329

			PCT/US 06/62329	
A. CLASSIFICATION OF SUBJECT MATTER IPC(8): C12N 5/06, 5/16; C07K 16/00 (2007.01) USPC: 435/339.1 According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED				
Minimum documentation searched (classification system followed by classification symbols)				
USPC: 435/339.1				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 530/388.35; 424/188.1, 208.1; 514/150 (text search-see terms below)				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)				
PubWEST(PGPB,USPT,USOC,EPAB,JPAB); Google; PubMed Search terms: HIV, dementia, neuroprotect, GSK-3, inhibitor, valproic acid, paullone, lithium				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages			Relevant to claim No.
X	DOU et al. Neuroprotective Activities of Sodium Valproate in a Murine Model of Human Immunodeficiency Virus-1 Encephalitis. J. Neurosci., 8 October 2003, Vol 23, No 27, pp			1-4 and 7-45
Y	9162-9170; Abstract; pg 9162, para 1; pg 9163, para 1; pg 9169, para 2		5-6 and 46	
Y	KNOCKAERT et al. Intracellular Targets of Paullones. J. Biol. Chem., 12 July 2002, Vol 277, No 28, pp 25493-25501; Abstract			5
Y	DOU et al. Neuroprotective Mechanisms of Lithium in Murine Human Immunodeficiency Virus-1 Encephalitis. J. Neurosci., 14 September 2005, Vol 25, No 37, pp 8375-8385; Abstract			6 and 46
Further documents are listed in the continuation of Box C.				
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "B is special categories of cited documents: "T is later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention				
	ipplication or patent but published on or after the international	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive		
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is		
means	ent referring to an oral disclosure, use, exhibition or other ent published prior to the international filing date but later than	combined with one or more other such documents, such combination being obvious to a person skilled in the art		
the priority date claimed				
Date of the actual completion of the international search 16 July 2007 (16.07.2007)		11 SEP 2007		
Name and mailing address of the ISA/US		Authorized officer:		

PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (April 2007)

Facsimile No. 571-273-3201

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450. Alexandria, Virginia 22313-1450